



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

June 10, 2005

MEMORANDUM

SUBJECT: NPDES Inspection Report
Department of the Navy
Puget Sound Naval Shipyard

NPDES Permit # WA-000206-2

FROM: Andrew Hess, Environmental Scientist
Investigations and Engineering Unit

TO: Kim Ogle, Unit Manager
NPDES Compliance Unit



Attached is the NPDES Inspection report and supporting documentation for the CEI inspection conducted at the Puget Sound Naval Shipyard in Bremerton, Washington on June 2, 2005. I was accompanied by Susan Poulsom.

If you have any questions I can be reached at 360 871-8711.

Attachments

NPDES Compliance Evaluation Inspection Report

FACILITY: Puget Sound Naval Shipyard
Department of the Navy
Bremerton, WA 98314-5000

PERMIT #: WA-000206-2

FACILITY CONTACT: Bruce Beckwith, Water Programs Manager
Phone: 360 476-0118

RESPONSIBLE OFFICIAL: Steven S. Rupp, Division Head
Environmental Division
Code 106.3
1400 Farragut Ave.
Bremerton, WA 98314-5001
Phone: 306 476-6009

INSPECTION DATE: June 2, 2005

REPORT DATE: June 10, 2005

INSPECTOR: Andrew Hess, Environmental Scientist
Investigation and Engineering Unit



Introduction

On June 2, 2005 I performed an NPDES CEI inspection of the Puget Sound Naval Shipyard in Bremerton, Washington. I met Mr. Bruce Beckwith, Water Programs Manager, at the visitor pass and ID building at about 8:45 a.m. Mr. Beckwith was accompanied by Mr. Brooks Walpole, Environmental Protection Specialist, and Ms. Susan Poulosom, the EPA permit writer who he had just picked-up from the Seattle/Bremerton ferry. We proceeded to Mr. Beckwith's office where I also met Mr. Gerald Sherrell, Environmental Program Branch Head and Mr. Steven Rupp, Division Head, Environmental Division. I showed them my credentials and explained the scope of the inspection. Mr. Beckwith showed us a copy of a tentative agenda based upon the information I gave him in a pre-notification telephone call two days prior.

Overview

Mr. Beckwith gave a brief overview of the various water treatment systems within the shipyard which include the Electroplating Wastewater pretreatment system, Oily Water Treatment System, Wastewater Filtration Equipment, and the Process Water Collection System, (PWCS). He also later showed us a presentation which included a description of a self-contained high-pressure water system for cleaning and removing paint from ship hulls. Except for the PWCS, the treated water from these systems is discharged to the City of Bremerton Wastewater Treatment Plant. Water from the PWCS can be routed to the Bremerton treatment plant or to the bay.

Mr. Beckwith explained that to determine when and how much dry dock drainage is discharged to the bay versus being routed to the City of Bremerton sanitary system is dependent on several variables. These variables include the amount of rainfall, type of work being performed in the dry dock, turbidity of the discharge as monitored in the PWCS, and limitations on the volume of water allowed to discharge to the City of Bremerton. This requires Mr. Beckwith and others to continuously monitor all dry dock activities in order to balance the water discharge so that limitations are not exceeded to either the City of Bremerton or the NPDES outfalls.

Mr. Beckwith said that he can monitor the turbidity and flow through the PWCS at any time from his desk. He said that if no projects are being performed in a dry dock the PWCS is normally not used, so that the drainage goes directly to the bay. Mr. Beckwith reviewed with us the direct correlation between turbidity and copper concentration in their dry dock discharge. He said that shop 90 maintains the Great Lakes Instrument turbidimeter and that they calibrate it with a plastic calibration cell.

Mr. Beckwith reviewed with us the actions they have taken to reduce the number of copper exceedences in their NPDES discharges. In addition to installing and operating the PWCS as described above, they periodically clean the sumps and tunnels of sediment in the collection system and have changed work practices to minimize deposition of copper. He explained that each project is individually addressed to assess which BMPs are best suited to minimize discharge of pollutants. Mr. Beckwith said that most of the copper comes from the paint that is being removed from the ships. He said that copper is still a component of the new paint, so this will be an ongoing issue.

Mr. Beckwith explained to us their dry dock discharge system and how it functions during normal working conditions versus flooding and de-watering. He said that they have relocated their sampling locations so that it is more convenient to collect their samples. He also stated that he felt composite samples would more accurately reflect their true discharge and would prefer this requirement in their new permit rather than the grab samples which they now collect. I agreed with him that composite samples would be more representative so long as they were collected in proportion to discharge flow.

Mr. Sherrell reviewed with us the superfund work being performed in the industrial area to address historical contamination on land and in the bay. They have hired a contractor, Tetra Tech, to clean their stormwater system which includes cleaning the catch basins and fixing breaks in order to keep soils from entering the pipes and subsequently being deposited into the bay. They are also developing an "As-Built" for the industrial area stormwater system which should eventually accurately identify most all of the piping, inlets and outfalls. This project started in 2003 and is projected to be completed in 2006.

Records Review

Mr. Beckwith showed us a portion of the BMP computer training module which each shipyard employee is required to take annually. He explained to us that each shop holds a daily safety brief where environmental issues are addressed. He showed us copies of some of the Project Daily Safety Meeting Bulletins which did contain relevant BMP and other environmental related topics to discuss.

I reviewed various other inspection, training, and guidance documents relative to stormwater BMPs. The dry dock pre-flood inspection records appeared to adequately address potential contaminants and was being used effectively. I found that although the shipyard is not necessarily following the exact guidance that they have outlined in their Stormwater Pollution Prevention Plan, they are making a conscience effort to practically address these issues. I commented that their documentation should be periodically updated to accurately reflect the procedures they are following and will also serve to provide consistency in the event of personnel change.

Mr. Beckwith provided me copies of several of various documents which are attached. These include a CD of their Stormwater Pollution Prevention Plan (dated 5/11/05), Comprehensive Site Compliance Evaluation 2004, SWPPP Professional Engineer's Certification dated October 30, 2003, Inspection action, findings, and reporting flow sheets, and Stormwater inspection sheets for several operations and areas.

Field Inspection

Mr. Beckwith and Mr. Brooks led Ms. Poulson and me on a tour of selected areas within the shipyard. On the way to Dry Dock 6 we passed the pressure/steam cleaning facility. Mr. Brooks stated that all discharges from here go to the sanitary system.

Dry Dock 6

At Dry Dock 6 we met and were accompanied by Mr. James Barr, EHS (Environmental Health Specialist?). Mr. Beckwith explained that each project has an EHS designated to oversee and assure that environmental issues are adequately

addressed for that specific project. The aircraft carrier *USS John Stennis* was undergoing various stages of work in this dry dock at the time of our inspection.

In the dry dock we observed a worker sweeping-up debris, the coffer dams, and silt screens in the drains. We looking in one of the side tunnels where I saw a fine layer of silt on the bottom. Mr. Beckwith said that most of the silt entering the dry dock comes from the bay when the dock is flooded.

Dry Dock 6 PWTS and Sampling Site

Mr. Beckwith took us to the Dry Dock 6 PWTS where he reviewed the process and monitoring equipment. I commented to Mr. Beckwith that even though the turbidimeter is not used directly for NPDES compliance purposes, calibrating it periodically with a liquid primary standard like Formazin would be a good practice. I pointed out to him on the turbidimeter how this appeared to be a relatively easy process. We also observed their new sampling location which appeared acceptable to me. We also observed their composite sampler which could be used for future composite sampling if required.

Maintenance Area

Mr. Beckwith took us to the Maintenance area a shop where he stated that this is a worst case scenario for potential discharges of pollutants. He stated that they changed their practices from keeping the better non-leaking vehicles inside, to now storing them outside, and the "leakers" inside. They keep drip pans under vehicles to catch any leakage. We also saw the vehicle wash station which uses recycled water and discharges to the sanitary system.

RMTS

We visited an outdoor temporary storage area identified as "RMTS." The ground was covered in areas with silt and other materials such as apparent paint chips. The stormwater drains did not have any fabric as we previously saw in Dry Dock 6. Mr. Beckwith explained to us that half of the area drains into a catch basin which contains an old filtration system that was installed for experimentation, but never worked properly and is not currently maintained. He said that the whole area should have been designed to discharge through this filtration system. The filtration system is manufactured by Stormwater Management Inc. in Portland, Oregon.

In this area I also observed several items with PCB labels attached. These included a "Dust Hog" air filtration system, materials labeled "PCB Contaminated," and a dumpster with a PCB label that was leaking fluid that flowed to the stormwater drain. Mr. Beckwith said that PCBs were outside his area of knowledge so he could not comment on the specifics of these labeled materials. Later in the day during our close-out meeting I raised this issue, and Mr. Sherrell stated that he was familiar with the PCB work in the

shipyard and was confident that these materials did not pose a hazard to being released into the environment.

We opened one of the lids to a catch basin at the RMTS where I observed and pointed out to Mr. Beckwith an oil sheen on the water. I commented to him that the RMTS area had significant potential for release of contaminants to the stormwater system and suggested that they better address these potential releases through BMPs or other means.

Dry Dock 3

Our final stop was at Dry Dock 3 where we were joined by Mr. Nick Whittelton, EHS. I commented to Mr. Beckwith that in general I felt this dry dock was not as clean as Dry Dock 6, and pointed out that they did not have fabric over the drains. He commented that much of the floor debris were pieces of barnacles being removed from the hull of the ships. I stated that the material I observed at the south end of the dry dock in my opinion appeared to be dirt, paint chips, and other industrial generated material rather than pieces of barnacles.

Close-Out Meeting

A close-out meeting was held with Mr. Beckwith, Mr. Sherrell, and Mr. Rupp. I reviewed with them my findings as stated in this report. I commented that in order for them to get a copy of this report, which they desired, they needed to contact Kim Ogle of the NPDES Compliance Unit.

No pictures were allowed within the shipyard. As this was a Compliance Evaluation Inspection, no samples were collected. I left the shipyard at about 4:30 PM.



Andrew Hess



Date

Attachments: EPA Form 3560-3
ICDS
PSNS Documents